

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20054**

In the Matter of

Advanced Television Systems
and Their Impact upon the
Existing Television Broadcast
Service

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MB Docket No. 87-268

To: The Commission

**COMMENTS OF
EDUCATIONAL BROADCASTING FOUNDATION, INC.**

Educational Broadcasting Foundation, Inc. ("EBFI"), the noncommercial educational licensee of analog television station WLAE-TV, NTSC Channel 32, and permittee of digital television station WLAE-DT, DTV Channel 31, each licensed to New Orleans, Louisiana (Facility ID No. 18819) ("WLAE"), by its attorneys, hereby submits these comments in response to the *Seventh Further Notice of Proposed Rulemaking* (the "FNPRM") in MB Docket no. 87-268. The Commission has proposed in this proceeding the adoption of a new DTV Table of Allotments to provide eligible stations with channels for DTV operations after the DTV transition and to specify certain technical parameters for each station's DTV operations. By these comments, EBFI requests that the proposed DTV Table of Allotments be amended to specify maximized facilities as provided herein for which EBFI would have been allowed to certify had it timely filed FCC Form 381.

In preparing the proposed new DTV Table of Allotments, the Commission relied in large part on prior certifications which were made by DTV licensees on FCC Form 381 by November 5, 2004. Forty-one stations did not submit those certification forms timely and so by default were evaluated based on replication facilities; however, the Commission in Paragraph 28 of the FNPR has authorized them to file comments proposing changes to their specified facilities to request maximized facilities for which they would have been allowed to certify.

EBFI obtained the issuance on August 14, 2000 of FCC Permit No. BPEDT-20000210AAF, authorizing DTV facilities for WLAE of 200 kW effective radiated power ("ERP") with its transmitting antenna radiation center at 308 meters height above average terrain ("HAAT"). EBFI misunderstood that the Commission would evaluate WLAE based upon those permitted facilities in the event that EBFI did not file an FCC Form 381 by November 5, 2004. EBFI certainly would have filed an FCC Form 381 specifying those already-permitted maximized facilities had it known that, upon its failure to do so, the Commission would evaluate WLAE at its original allotment parameters of 66.7 kW ERP with its transmitting antenna radiation center at 274 meters HAAT. WLAE's permitted maximized facilities, subsequently modified only by a reduction of authorized power to 117 kW ERP due to financial constraints, were completed and a license application was filed (FCC File No. BLEDT-20050803ACD) that is still pending. EBFI timely filed an FCC Form 382 in the channel election process and received assignment of DTV Channel 31 for its post-transition operations.

WLAE's analog and digital transmission facilities, its main studio and all related equipment and other contents were totally destroyed on August 29, 2005 by Hurricane Katrina and its aftermath. The devastation was so complete, and reconstruction efforts have been so hampered by factors wholly beyond the control of EBFI, that it was forced to seek special temporary authority to remain dark until March 1, 2007, together with an extension of its license, both of which the Commission granted by letter dated August 24, 2006 from Chief, Video Division, Media Bureau.

Despite those formidable obstacles, and the fact that EBFI as a public television station must of necessity rely upon federal and private grants and private donations to fund all of WLAE's capital and operational needs, EBFI has made substantial progress due to its diligent efforts in restoring service to the public, as the Commission has formally recognized. Those efforts have included securing adequate funding to obtain replacement transmitting equipment

with RF power capability sufficient to allow post-transition digital operation of WLAE at 200 kW ERP as previously authorized by FCC Permit No. BPEDT-20000210AAF.

The FNPRM authorizes modification of the proposed DTV Table of Allotments in order for a station to take advantage of such circumstances upon the station (1) demonstrating that the area served by its authorized facilities extends beyond the area to which it certified and (2) submitting an engineering analysis demonstrating the proposed certified facilities would not result in interference in excess of 0.1 percent to any licensee's existing tentative channel designation ("TCD").

Submitted as an integral part of these comments is a technical exhibit prepared by Stanley Salek, PE, of Hammett & Edison, Inc. Mr. Salek demonstrates in it that a change to specify the maximization facilities sought for WLAE herein meets the modification criteria of the FNPRM and serves the public interest. It shows that the proposed modification causes no new interference over and above that already caused by WLAE's permitted DTV facilities, other than of 0.02% to the TCD operations of Station WGBC, DTV Channel 31, Meridian, Mississippi, which is well below the 0.1% *de minimis* maximum established in the FNPRM.

A refusal to permit the requested modification will result in loss of DTV service to significant areas and populations, as WLAE will be required to operate with replication facilities at the conclusion of the DTV transition in 2009 at a reduction of its ERP to only 57% of its presently-authorized power of 117 kW and only 33% of the 200 kW sought herein. Loss of service is *prima facie* inconsistent with the public interest. See *Hall v. FCC*, 237 F. 2d 567 (D.C. Cir. 1956).

The vital role which educational television stations play in our society has been widely recognized for decades by the United States Congress, the Commission and many others. That role is even more essential in a region of the country such as New Orleans -- one which has been devastated by nature and is struggling to rebuild.

WLAE should be allowed to operate post-transition with the maximized facilities that it had initially been authorized to construct pursuant to FCC Permit No. BPEDT-20000210AAF. The proposed change will not adversely impact the service area or population of WLAE or create any impermissible interference to any other station. This requested modification to the proposed DTV Table of Allotments will serve the public interest by assisting in the timely and efficient transition to digital service and by providing the best possible service to the public of the New Orleans area.

In view of the foregoing, EBFI requests that the Commission apply the provisions of the FNRPM and grant its request that (a) the proposed DTV Table of Allotments be amended to specify for WLAE maximization facilities of 200 kW ERP with its transmitting antenna radiation center at 274 meters HAAT and (b) WLAE be permitted to construct and operate those facilities after the DTV transition is completed.

Respectfully submitted,

**EDUCATIONAL BROADCASTING
FOUNDATION, INC.**

By: 
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January 8, 2007

Attachment: Statement of Hammett & Edison, Inc, Consulting Engineers

Station WLAE-DT • DTV Channel 31 • New Orleans, Louisiana

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Educational Broadcasting Foundation, Inc. ("EBFI"), licensee of noncommercial Station WLAE-TV, NTSC Channel 32, DTV Channel 31, New Orleans, Louisiana, FCC Facility ID No. 18819, to prepare a technical statement in support of comments filed in response to the Seventh Further Notice of Proposed Rule Making (FNPRM) to FCC Media Bureau Docket No. 87-268, *Advanced Television Systems and their Impact upon the Existing Television Broadcast Service*, released on October 20, 2006.

Background

Station WLAE-TV was originally allotted DTV Channel 31 with 66.7 kW effective radiated power (ERP) and transmitting antenna radiation center at 308 meters height above average terrain (HAAT). In 2000, EBFI filed an FCC Form 340 construction permit (CP) application for maximized WLAE-DT facilities of 200 kW ERP at the allotment site with radiation center at 274 meters HAAT, using a Dielectric Model TLP-16M(C) directional transmitting antenna with major lobes oriented at 247°T and 353°T. That application was subsequently granted on August 14, 2000, and issued Permit File No. BPEDT-20000210AAF. In early 2005, EBFI filed a WLAE-DT CP modification application to reduce power from 200 kW ERP to 117 kW ERP, with no other changes to the originally permitted facilities. The reduction was necessitated by financial conditions existing at the time that prevented acquisition of a transmitter capable of attaining authorized ERP. The CP modification application was granted on May 31, 2005, and issued Permit File No. BMPEDT-20050513AAI. The authorized facilities were completed shortly thereafter, and an FCC Form 302-DTV license application was submitted, File No. BLEDT-20050803ACD.

In late August 2005, New Orleans and surrounding areas were decimated by Hurricane Katrina, which also severely flooded the WLAE transmitting facilities. The tower and transmitting antenna suffered less significant damage, but the transmitting equipment was completely destroyed. Since that time, WLAE-DT has remained silent with FCC permission while reconstruction efforts have progressed.

FCC Form 381 Certification Filing

By November 5, 2004, all DTV licensees were required to submit FCC Form 381, certifying whether they would construct replication or maximization facilities. EBFI did not complete the filing for WLAE-DT, but later did timely file FCC Form 382, requesting DTV Channel 31 for its post-transition operation. Because no Form 381 had been filed, the present FCC tentative channel designation (TCD) table, found in Appendix B to the FNPRM, lists the WLAE-DT facility at its original allotment



Station WLAE-DT • DTV Channel 31 • New Orleans, Louisiana

parameters. Section III(C) of the FNPRM, at Paragraphs 28 and 29, provides another opportunity for stations that did not timely file Form 381, such as WLAE-DT, to request specific maximized facilities for which they would have been allowed to certify.

Proposed Conditions

In November 2004, at the Form 381 filing deadline, WLAE-DT was permitted to construct maximized facilities of 200 kW ERP at 274 meters HAAT. As post-hurricane reconstruction efforts related to the WLAE-DT transmitting facilities have progressed, it has been determined that replacement transmitting equipment will have the RF power output capability to allow post-transition operation of WLAE-DT at the originally authorized 200 kW ERP, 274-meter HAAT, with no other changes to the facilities presently authorized by the modified CP. Thus, EBFI respectfully requests that these maximized facilities be specified in the revised TCD table for WLAE-DT. A technical summary of the proposed WLAE-DT post-transition technical operation is provided in accompanying Figure 1.

In support of this request, an FCC OET-69 analysis has been conducted to determine if the proposed operation would comply with FCC *de minimis* interference criteria. As shown in the accompanying summary of Figure 2, no interference is caused to any facility, except the TCD operation of Station WGBC, DTV Channel 31, Meridian, Mississippi, which at 0.02% is well below the FCC 0.1% *de minimis* maximum.

List of Figures

In carrying out these engineering studies, the following attached figures were prepared under my direct supervision:

1. Engineering specifications of proposed maximized post-transition DTV operation
2. Summary of OET-69 interference analysis of proposed maximized DTV operation.



Stanley Salek, P.E.

January 5, 2007



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

Station WLAE-DT • DTV Channel 31 • New Orleans, Louisiana

**Engineering Specifications of
Requested Post-Transition Maximized DTV Operation**

A. Transmitter Site

Geographical Coordinates
(NAD27)

29° 58' 57" N
89° 57' 09" W

2 Bayou Bienvenue Paris Road, Chalmette, Louisiana

B. Height

FCC Tower Registration No.	1000007
Elevation of site above mean sea level	0 m
Height of tower plus appurtenances above site	320 m
Overall height above mean sea level	320 m
Height of average terrain above mean sea level (3-second, 8 radials)	0 m
Effective height of antenna above site	274 m
Effective height of antenna above mean sea level	274 m
Height of radiation center above average terrain (HAAT)	274 m

C. Antenna

Make/model	Dielectric, Type TLP-16M(C)	side-mount directional
Axis of symmetry		300°T
Electrical beam tilt		1.0°
Mechanical down tilt		none
Polarization		horizontal

D. Operation

Channel	31
Transmitter output power (DTV average)	9.40 kW
Antenna feedline efficiency (estimated)	70%
Main beam antenna gain	30.4
Main beam effective radiated power	200 kW



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
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Figure 1

Station WLAE-DT • DTV Channel 31 • New Orleans, Louisiana

Summary of OET-69 Interference Analysis Requested 200 kW ERP Maximized Operation

OET-69 Interference Analysis, 2000 Census
tvstudy v3.2.12

Channel-election conflict study, in-core only, DTV protection only

Default emission mask for digital Class A and LPTV/translator records: simple

Before case parameters:

Station: D31 WLAE-TV TCD
City: NEW ORLEANS, LA
Facility ID: 18819
Coordinates: N 29-58-57.0
W 89-57-09.0
Height AMSL: 310.0 m
Maximum ERP: 66.7 kW
Azimuth pattern: rep-LANEW_ORLEAN31
Orientation: 0.0
Elevation pattern: OET-69 generic
Service level: 40.4 dBu

After case parameters:

	--Modified-----	--Original-----
Station:	D31 WLAE-TV CP	D31 WLAE-TV CP
City:	NEW ORLEANS, LA	NEW ORLEANS, LA
Facility ID:	18819	18819
Coordinates:	N 29-58-57.0	N 29-58-57.0
	W 89-57-09.0	W 89-57-09.0
Height AMSL:	274.0 m	274.0 m
Maximum ERP:	200 kW	117 kW
Azimuth pattern:	DIE-TLP-16M C	DIE-TLP-16M C
Orientation:	0.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	40.4 dBu	40.4 dBu

Warning - some records had missing or bad data:

D30 A KFOL-CA CP Re-computed DTV baseline population

Protected station		Base Pop	Before		After		%Chng
			IX Change	%Base	IX Change	%Base	
D30 A KFOL-CA CP	HOUMA, LA	97,065	0	0.0	0	0.0	0.00
D31 KLAX-TV TCD	ALEXANDRIA, LA	273,302	-290	-0.1	-290	-0.1	0.00
D31 WGBC TCD	MERIDIAN, MS	262,947	-122	-0.0	-64	-0.0	0.02
D31 WSRE TCD	PENSACOLA, FL	1,253,790	-516	-0.0	-516	-0.0	0.00
N30+A KFOL-CA LIC	HOUMA, LA	125,555	0	0.0	0	0.0	0.00
N30-A WLFT-CA CP	BATON ROUGE, LA	576,775	0	0.0	0	0.0	0.00
N30-A WLFT-CA LIC	BATON ROUGE, LA	554,534	0	0.0	0	0.0	0.00
N31-A KAGN-LP LIC	CROWLEY, LA	45,799	2,072	4.5	2,072	4.5	0.00



HAMMETT & EDISON, INC.
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Figure 2